UMASS/AMHERST
312066005397475

1870
Hort. Lib.
1879246

UNIVERSITY OF MASSACHUSETTS · AMHERST · 1863

DATE DUE			

UNIVERSITY OF MASSACHUSETTS
LIBRARY

SB
1
W9
1870

MASSACHUSETTS AGRICULTURAL COLLEGE.

TRANSACTIONS

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1870.

COMPRISING

THE ADDRESS OF THE PRESIDENT; THE REPORTS OF THE COMMITTEES OF THE SOCIETY; AND THE ANNUAL REPORT OF THE SECRETARY AND LIBRARIAN FOR THE YEAR 1870.

EDITED BY

EDWARD W. LINCOLN.

WORCESTER, MASS.:
PRINTED BY EDWARD R FISKE, CROMPTON'S BLOCK, MECHANIC STREET.
1871.

LIBRARY
UNIVERSITY OF
MASSACHUSETTS
AMHERST, MASS.

532.06
W89 1870

GENERAL INDEX.

Address of Hon. Francis H. Dewey, President (Sept. 22, 1870,)..... 5
Report on Apples 9
Report on Grapes, Peaches, etc..... 11
Report on Plants, Flowers, etc..... 14
Report on Pears.....16
Report on Vegetables 18
Annual Report of Edward W. Lincoln, Secretary and Librarian.....20
Officers of the Society for 1871..... .....Last page of Cover.

ADDRESS

OF

HON. FRANCIS H. DEWEY,

PRESIDENT.

DELIVERED THURSDAY, SEPTEMBER 22D, 1870.

Ladies and Gentlemen of the Worcester County Horticultural Society:

OF the present exhibition as a whole, I need not speak; it speaks for itself; its glorious success gladdens our hearts and proclaims that Mechanics Hall is not too large for the annual display of the choice and superior fruits, the rare and beautiful plants and flowers, and the no less creditable and valuable collection of vegetables which the horticulturists of Worcester County can always contribute. Nor need I remind you of the intellectual entertainment of last evening. What other society can boast of having enjoyed the same evening, the instructive eloquence of our ex-president (GOV. BULLOCK), the inspiring suggestions and experience of the President of the Massachusetts Horticultural Society (J. F. C. HYDE, Esq.), and the rich stores of agricultural learning, and well-told stories of the President of the New England Agricultural Society (Hon. GEORGE B. LORING).

Our Society, formed in the year 1840. this week holds, strictly speaking, its thirtieth annual exhibition. Only in one year, in 1861, has the annual exhibition been omitted; then, as the record reads, "in consequence of the lightness of the crop of fruits of every species."

In a review of the past and a comparison of our humble beginning, and our present prosperous position, we find good cause for congratulation upon the success which has attended the efforts of our predecessors and ourselves. In 1840, with few or no members admitted free, the receipts at the close were only

$140; in 1869, with several hundred members admitted free, the receipts for admission amounted to $500. At the exhibition at the hall of the Society in Waldo Block, in 1848, all the duties were performed by two committees — one on flowers and decorations, the other on all fruits and vegetables. In 1851, the first year that the Society held its exhibition in Horticultural Hall, the Society was so destitute of means, that no premiums were offered, the only reward to contributors being an honorable mention by the committees. In 1852, the premiums on apples and pears severally were $18. This year the former are $133 and the latter $150. This year the premiums on grapes are $92. Plums, peaches and quinces, $57. Plants and flowers, $240, and on vegetables, $171. We cannot question that this increase in the pecuniary inducements offered and the liberality of the Society in premiums will be met in a corresponding spirit by its members. In many other respects great changes have taken place, Formerly the number of contributors were few, and a large portion of the specimens entered came from the grounds of a few individuals largely engaged in the cultivation and sale of pear trees; but the great changes and growth of our city has, in a remarkable manner, affected our fruit-orchards and gardens. The trees whose fruit ten years ago so largely contributed to fill our tables, have fallen beneath the improving axe or have been transplanted to more quiet quarters. It is difficult to recognize the spot on which the one hundred and twenty varieties of pears, contributed by John Milton Earle in 1860, were raised, on his then lot between Main and High streets, which, together with the lot of his neighbor George T. Rice, who yearly exhibited choice fruit, has now been appropriated to the erection of a large cathedral and blocks of stores. We find now Merrick street with numerous dwelling-houses extending over the grounds from which in the same year D. Waldo Lincoln contributed one hundred and three varieties of pears. The former customer of the Colton nursery would hardly realize that the ground on the corner of Main and Austin streets, now occupied by high brick blocks of stores, and boot and shoe manufactories, was the place where for so many years Samuel H. Colton raised and sold, not the customers, but all varieties of fruit trees. These three gentlemen, Earle, Lincoln and Colton, were for many years our largest contributors. But the reduction in the number of varieties contributed by single individuals has been more than compensated for by the increased number of competitors. As a consequence, there is a greater discrimination as to varieties and great improvement in the quality of the fruit raised. All must be satisfied that it is better to cultivate a small number of varieties of choice and approved fruit than to experiment with a large number of uncertain kinds of fruit. And to aid in their selection in pursuance of the general purposes of the society, the Trustees have recommended lists of those which have proved best adapted to our soil and climate, which lists are by them revised as occasion requires.

It is not one of the privileges of the President to inflict upon you a lengthy address at this time, but it has been customary for him to state the condition of

the Society and briefly its operations during the past year, leaving the matter of detail for the annual report of the Secretary and Librarian.

It is always pleasant to speak of our pecuniary condition, whenever we are strong in our own resources, and with a reasonable certainty as to the future; this is your position to-day.

Our valuable real estate on Front street gives us an annual income of $3500, after making the necessary reservation of Horticultural Hall and its ante-rooms when required by ourselves. Our whole indebtedness does not exceed $1200, which will undoubtedly be paid during the next year, without affecting our ability to expend increased premiums and make any other desirable improvements.

The question of the sale by the Society of its real estate has been sometimes agitated, with a view either to erect another building upon some other location or to make a different investment of the funds of the Society. But the opinion of the committee appointed to consider this matter was that the best interests of the Society would be promoted by retaining the present property, and it seems to me very clear that no better investment could be made of the funds of the Society; that our own hall and rooms are abundantly sufficient for all ordinary exhibitions and purposes, that the only occasion that we have for a larger hall is for this one annual autumnal exhibition, for which we can amply provide by hiring Mechanics Hall, a course I deem far preferable to that of investing our money in the erecting of a new building, embarrassing our future operations, and depriving us of the large income that we can now appropriate to the encouragement of the legitimate objects of the Society.

The weekly exhibitions were commenced as early as the year 1861. I know of no feature of the Society more worthy of commendation. Their great usefulness is beyond question. Attended, as they are, by our experienced horticulturists, they afford to the young cultivator of fruits and flowers an opportunity for information more accessible and correct than can be gained from books. They afford the only opportunity for the display of early fruits and flowers, new varieties of fruits are discussed and tested, all specimens brought in are correctly named, and the conversational discussions in which all are invited to participate, tend to increase the interest of the members in the subject of horticulture. These exhibitions have been continued during the past year, and the display of fruits and flowers, and the attendance of members and strangers has proved their appreciation of their value. For the success of the weekly exhibitions the Society is greatly indebted to the faithful services of the Secretary, who has been constantly in attendance, keeping a full record of all entries, and has weekly furnished a brief statement thereof for publication.

The value of the large and constantly increasing library of the Society, is not generally known or appreciated by the members. Most all the valuable English and American books on Agriculture and Horticulture, with full sets of journals and magazines on the same subject, are to be found on the shelves in

the ante-room of its hall, which is open every Thursday afternoon, for the delivery of books to members. The increasing number of persons availing themselves of the privilege of the library is evidence of a greater appreciation of its value.

I have before contrasted the former and the present condition of the Society. During the last thirty years it has diffused a large amount of valuable information in this community in relation to the cultivation of fruit, enabling the beginner to select the most approved varieties without the loss of time and expense incident to ignorance or experimenting; but ours is one of the cases where the work is never completed. There is always room for improvements and more laborers, and our successors may, thirty years hence, be enabled to point as triumphantly to their progress as we have done to our own.

The funds of the society are now sufficient to enable us to add a large amount to our present liberal premium list, if by this pecuniary inducement it is thought that we can advance the objects of the society.

The attractions of all the departments might be greatly increased, if a larger number of the persons who have fine fruits and flowers would take the slight trouble that is necessary to gather a few specimens and send them to the exhibition; there are hundreds of gardens gladdening the owners with the profusion of such fruits, who do not seem to realize that to the influence of this society on some former owner, if not on themselves, they may owe their present feast of good things, and who certainly ignore the responsibility all are under to aid in any good cause. Our friends throughout this County should remember that ours is not an association confined to this city and vicinity. It is the County Society, — the parent of all, and that they all have here a right, a duty and a welcome; in their devotion to their own rural societies they should not forget the attachment and service that is due to the parent.

As to the details of the present exhibition, if I should speak, it would be overreaching on the province of the various committees to the hearing of whose reports this evening in appropriated.

In conclusion, I will simply add, believing that as the soil produces best under a rotation of crops, so the growth of the Society will be promoted by rotation in the office of President, that at the end of the present term I shall retire from the office which through your kindness I have held for the past four years.

REPORTS.

REPORT ON APPLES.

Elijah B. Stoddard, *Chairman;* S. H. Colton, O. B. Hadwen, J. Frank Allen, J. S. Ballard, S. A. Knox, J. K. L. Pickford, of *Worcester*, J. A. Fayerweather, of *Westborough*, Cyrus White of *Millbury*, and Isaac B. Hartwell, of *Oxford*.

The Committee on Apples submit the following report:

For the best collection of not less than six specimens of each variety in the 1st class, Stephen S. Foster $15 00
For the second best, Sylvanus Sears 12 00
For the third best, O. B. Hadwen 9 00
For the best twenty varieties, of twelve specimens each, in the 2d class, Adams Foster and E. M. Banning, 1st prize; but to receive one-half of the the 1st and 2d, each 11 00
For the third best, Cyrus White of Millbury 8 00
For the best twelve varieties, of twelve specimens each, in the 3d class, Alden H. Sears, ... 8 00
For the second best, Henry Marble, of Millbury 6 00
For the third best, Newell Wood 4 00
For the best six varieties, of twelve specimens each, in the 4th class, Joseph Boyden 5 00
For the second best, D. S. Goddard 4 00
For the third best, Mrs. Geo. A. Chamberlain 3 00
For the best three varieties, in the 5th Class, D. B. Comins 3 00
For the second best, W. Y. Holman 2 00
For the best twelve Gravenstein, Joseph Lovell 2 00
For the best twelve Holden Pippin, S. H. Colton 2 00
For the best twelve Porter, Geo. J. McCracken 2 00
For the best twelve Leicester Sweet, Sylvanus Sears 2 00
For the best twelve Hubbardston Nonesuch, James R. Pierce 2 00
For the best twelve Northern Spy, James Draper 2 00
For the best twelve Baldwin, Eri Saunders 2 00

For the best twelve Mother, Sylvanus Sears, ... 2 00
Fot the best twelve Rhode Island Greening, Joseph Boyden..... 2 00
For the best twelve Maiden's Blush, Alfred Davis..... 2 00
For the best twelve of any other sort (Detroit), Mrs. Wm. Greenleaf..... 2 00

GRATUITIES.

Class 1, Isaac Mills, gratuity,..... ..... $3 00
Class 2, Joel Knapp, gratuity,..... 3 00
Class 3, J. K. L. Pickford, gratuity,..... ..... 3 00
Class 3, T. P. Curtis, gratuity..... ..... 2 00
Class 4, H. Drury. gratuity..... 2 00
S. H. Colton, specimen of Hawley, gratuity..... ..... 2 00
S. H. Colton, specimen of Leland's Spice, gratuity,..... 2 00
Eli Johnson, specimen of Mother, gratuity..... ..... 1 00
Eri Saunders, gratuity..... 1 00
E. H. Slocomb, of Grafton, gratuity 1 00

We have been unanimous in the award of premiums and congratulate the society upon the generous contribution, which has been made this year in this kind of fruit. There were 55 contributors and 631 plates; an excess over last year's contributors of 12, and in the number of plates, of 347.

The unparalleled dry summer has proved more favorable to the apple crop than could have been anticipated. The selected specimens were very fair in form, beautiful in color and delicious in flavor. Larger apples have been heretofore exhibited, but probably no exhibition has been more satisfactory to visitors than the present one. Perhaps the ample room and arrangement of the tables have afforded visitors a better opportunity for examination and the committee have been pleased with the universal satisfaction, which has been expressed at this display of fruit.

The "wheel of time" has turned again in apple bearing, and cultivators have reason to hope, that for some future years this fruit may be produced in equal abundance. Neither the poor or rich will have reason to complain of scarcity or price. The Apple trees seem to have had a "strike" but only to produce more instead of less. Cultivators may complain of the market price of 15 to 50 cents per bushel, and it is pretty evident that "apple sauce" will receive such a shaking, as will diminish materially the receipts of our Shaker friends for this year.

We advise all producers to turn their attention to raising only trees which shall bear the fairest and choicest varieties for the table. Such apples will always find a ready sale and be more profitable than those which produce "a little more cider too."

E. B. STODDARD, *Chairman.*

REPORT ON GRAPES, PEACHES, &c.

Edwin Conant, *Chairman*; George Jaques, S. V. Stone, T. M. Lamb, Horatio Phelps, of *Worcester*, Paul Whitin, George Cruickshanks, of *Whitinsville*, F. M. Marble, of *Grafton*, and Joseph C. Lovell, of *West Boylston*.

The Committee on Grapes, Peaches, &c., respectfully report:

That we have received no translation of the "&c.," but suppose it means unlimited jurisdiction, unless where expressly limited and sometimes where it is. Filled to air-balloon dimensions with the importance of our position, we neither mean to yield anything that belongs to us nor fail to claim many things that do not. Whether we make, or follow the example of politicians, we mean to assert our claims, right or wrong, especially wrong; to have our own way in questions of conflicting jurisdiction, notably on subjects we have no business with.

Our friend, Mr. George Thrall, of the Bay State Hotel, who is always very entertaining at home, offered a curious vegetable product, for the declared purpose of learning its name. We pronounce it a fungus, and wish that many and larger fungi, sapping the vitality of the Republic, were transmuted into like humble form and dimensions, and of as respectable a character.

Dr. S. G. Priest offered very curious specimens of nature's freaks or necessities in the form of many fruits and other objects, stated to be of the roots of low hemlock taken from crevices of rocky acclivities of Mount Washington.

Strawberry tomatoes, and their preserved fruit, were produced by Mrs. Ann M. Newell, of Worcester, and preserved or canned pears, peaches, strawberries and cherries, by Mrs. R. C. Dunlap, of Millbury.

Miss N. T. Durell, of Worcester, exhibited a case of very beautiful wax fruit and flowers, with imitations of jelly and other articles.

Henry Munger, of Holden, produced pea-nuts, with the growing plant, and this growth, interesting in itself, is doubly so from its association with the names of some ruling legislators, and their chief employment.

Approaching the great family of Grapes, we doff our hats, in deference to its undoubted primeval repute, its limitless variety, its excellence told and sung in all ages. The fruit culturists in the first garden must have had it, for no theologian presumes that Adam and Eve could have lived without it, though another article might have been available in the line of mantua-making.

Those who assert that the earliest wine was unfermented, ought to fix their date, for if we ascend no farther than Noah, the original package inspected by him in excess, had a mischievous power; and the gods of the later mythologies of the Greeks and Romans, sometimes tiring of their immortal nectar, used expressed grape juice with an effect so prejudicial to their moral conduct, as to

disqualify them for voting for, though they might be candidates on, a prohibitory ticket.

It certainly is true that the ideal of Gonzalo's Commonwealth in Shakespeare's "Tempest," has not yet been realized; for he would execute all things by contraries; admit no kind of traffic, no name of magistrate, letters should not be known; riches, poverty, and use of service none; contract, inheritance, boundaries of land, cultivation, vineyards, none; no use of metal, corn, or wine, or oil; no occupation; all men idle — all; and women too; no sovereignty, and yet he would be king on't.

The latter end of his Commonwealth forgot its beginning, as often happens to the "schemes of mice and men."

Grapes are sour to those who cannot get them. This Committee has not been troubled much in that way. We think that by the fable of the fox and grapes, it was intended to allegorise the feelings of disappointed aspirants to offices for which they were not fit.

The grape most affected by Captain Bragg, which, fairly administered, would cure the case of disloyal demagogues, was of a different character, hard, if not sour, apt pitifully to waste the claret of an armed enemy, and to cause jovial triumph on the other side, when its sale and use was not limited to any canisters of original importation.

Of grapes the Committee found twenty-six contributors of one hundred and seventy five parcels of fruit; and are happy to say that they found a manifest improvement upon the exhibition of last year, especially in the increased number and merit of out-door varieties, and the comparative absence of worthless and unimproved natives. They award:

For the best collection, grown under glass, fourteen varieties, Philip L. Moen	$12 00
For the second best, eleven varieties, Stephen Salisbury	10 00
For the best two clusters of Black Hamburg, Philip L. Moen	2 00
For the second best, F. M. Marble, of Grafton	1 00
For the best two clusters of any other black grape, Philip L. Moen (Wilmot's Hamburg)	2 00
For the best two clusters of any White Muscat (Muscat of Alexandria) Philip L. Moen	2 00
For the best two clusters of any other variety of white (White Syrian) Philip L. Moen	2 00
For the second best (White Frontignan) F. M. Marble, of Grafton	1 00
For the best collection of out-door grapes, not less than six varieties, thirty varieties, Joseph C. Lovell, of West Boylston	8 00
For the second best, fourteen varieties, Frank J. Kinney	5 00
For the third best, D. S. Goddard	3 00
For the best specimens of four bunches of Delaware, Frank J. Kinney	3 00

For the best specimens of four bunches of Isabella, Frank J. Kinney, $3 00
For the best specimens of four bunches of Concord, Horatio Phelps, 3 00
For the best specimens of four bunches of Diana, Horatio Phelps, 3 00
For the best specimens of four bunches of Iona, Horatio Phelps, 3 00
For the best specimens of four bunches of Rogers, No. 3, (Massasoit) Joseph C. Lovell, of West Boylston..... 3 00
For the best specimens of four bunches of Rogers, No. 4, (Wilder) John C. Whitin, of Whitinsville..... 3 00
For the best specimens of four bunches of Rogers No. 9, (Lindley) Joseph C. Lovell, of West Boylston..... 3 00
For the best specimens of four bunches of Rogers No. 15 (Agawam) Frank J. Kinney..... 3 00
For the best specimens of four bunches of Rogers No. 19 (Merrimac) Joseph C. Lovell, of West Boylston..... 3 00
For the best specimens of four bunches of Rogers No. 43 (Barry) Joseph C. Lovell, of West Boylston..... 3 00

Mr. Phillip L. Moen, of Worcester, exhibited some half dozen of beautiful and vigorous grape vines, growing in pots, and in fruit, thus furnishing a new and delightful feature of our exhibition.

Other contributors of Grapes, in differing numbers of varieties, are, Geo. H. Estabrook, Edward Earle, S. H. Colton, F. H. Dewey, James S. Robinson, Joseph E. Phelps, E. L. Brigham, D. C. Tourtellotte, Wm. Y. Holman, Wm. P. Kinney, Perry Thayer, Mrs. O. K. Earle, George Montgomery, Charles Nash, John B. Pratt, S. P. Hicks, John P. Kettell, all of Worcester, Devens Newton, of Millbury, and James Houghton, of Oakdale.

For the perfect specimen of Israella grape, offered by James Houghton, of Oakdale, the Committee would gladly have offered a premium, had any been offered by the society.

A beautiful new variety of White Grape, called Fedora, reputed hardy and valuable, from J. P. Langworthy, was exhibited by our friend Mr. James Cruickshanks, of Chelsea.

PLUMS.

Very few Plums were offered. We award,
For the best single plate Green Gage, Anthony Chase..... $1 00
For the second best, nameless plum, S. S. Foster. 1 00

PEACHES.

We found nine plates of Peaches, and award
For the best one variety of 12 specimens (Golden Yancey), William Matheson, of Whitinsville..... $3 00
For the second best (Early Crawford), S. S. Foster 2 00
For the third best (Early Crawford), Christopher Gunderson 1 00

A new seedling, called the Hunter Peach, of superior merit, was exhibited by Mr. James Cruickshanks, of Chelsea.

The other exhibitors were John G. Heywood, Mrs. O. K. Earle, Mrs. Simeon Clapp, and Mrs. James S. Robinson, all of Worcester.

O. B. Hadwen, exhibited nectarines.

QUINCES.

Three plates of Quinces were offered. We award:

For the best twelve Orange Quinces, Newell Wood, of Millbury $3 00

And recommend payment of a gratuity of one dollar to William Howe, of Millbury, and the same amount to Adams Foster, for their single plates of the Orange variety.

Mr. F. I. Kinney exhibited a seedling red raspberry in fruit, and a seedling strawberry.

Respectfully submitted,

EDWIN CONANT, *Chairman.*

REPORT ON PLANTS, FLOWERS, &c.

George E. Francis, *Chairman;* John Milton Earle, Clarendon Harris, Charles Richardson, D. S. Messinger, Henry Woodward, C. Willard Hamilton, and Henry A. Marsh, *Worcester.*

The Committee congratulate the Society that the contributors of Plants and Flowers, having triumphed in the contest with the drought, have filled every available stand and table and nook and corner of this great hall. If there is a little falling off in the quality of the cut flowers, the loss is more than made up by the increased number, variety, size and beauty of the Plants, and by a large and very fine contribution of flowers, plants and bouquets from the Olm Brothers, of Springfield. Our Society will always welcome such choice productions.

In awarding the premiums for collections of exotic plants, the committee found the same difficulty that has been in the way of their predecessors, namely, that the different sets of plants had very unequal advantages of position; the most desirable space in the body of the hall having been given to the largest contribution, while other plants, well worth the seeing had to be crowded into the background.

In the belief that one chief object of this Society is to offer the fairest possible field for competition, the committee recommend that in future the rule which governs in all other departments, be applied also to plants: that all entries in the same class, which comply with the regulations of the Society, shall be placed, as far as possible, side by side, with equal advantages of position, so that the public can examine and compare, as well as the judges.

The committee respectfully recommend the following Premiums and Gratuities:

For the best twelve specimens of variegated-leaved Plants, W. T. Merrifield	$20 00
For the second best, S. Salisbury	10 00
For the third best, P. L. Moen	5 00
For the best twenty specimens of Greenhouse Plants, W. T. Merrifield	15 00
For the second best, S. Salisbury	10 00
For the third best, P. L. Moen	6 00
For the best specimen plant, not having previously received a premium, J. C. Whitin, of Whitinsville	5 00
For the second best, S. Salisbury	3 00
For the best floral design, L. H. Bigelow	6 00
For the second best. Mrs. C. L. Hartshorn	4 00
For the best collection ornamental and bedding plants, Mrs. D. Tainter	5 00
For the second best (not awarded),	
For the best collection rare and new plants, S. Salisbury	8 00
For the second best (not awarded),	
For the best collection Zonale Geraniums (not awarded),	
For the second best, S. Salisbury	3 00
For the best collection of parlor plants, by amateurs, Mrs. Wm. Y. Holman	5 00
For the second best, Miss Susan E. Chamberlain	3 00
For the third best, G. E. Francis	2 00
For the best single plant, E. B. Hamilton	1 00
For the best collection cut flowers, Mrs. D. Tainter	6 00
For the second best, Miss Annie Fox	4 00
For the third best, S. Salisbury	2 00
For the best stand (not awarded),	
For the second best, P. L. Moen	2 00
For the third best (not awarded)	
For the best arranged basket or dish, L. H. Bigelow	3 00
For the second best, Mrs. D. Tainter	2 00
For the best hanging basket, grown by amateurs, G. E. Francis	3 00
For the second best (not awarded)	
For the best hanging basket, plants to have been growing therein at least one month, S. Salisbury	3 00
For the second best, W. T. Merrifield	2 00
For the best pair parlor bouquets, S. Salisbury	4 00
For the second best, Mrs. A. D. Foster	2 00
For the third best, Miss L. G. Allen	1 00
For the best pair hand bouquets, L. H. Bigelow	3 00
For the second best, Miss Maria Fox	1 00

For the best collection Gladiolus, named or unnamed varieties, from any source, J. M. Earle	$5 00
For the best twelve named varieties, 1st class, J. M. Earle	5 00
For the best specimen spike, J. M. Earle	1 00
For the best display of Asters, Mrs. George H. Estabrook	4 00
For the second best, P. L. Moen	2 00
For the third best, S. Salisbury	1 00
For the best display of Verbenas, Mrs. C. W. Hamilton	3 00
For the second best, Mrs. D. Tainter	2 00
For the best display of Pansies, J. C. Whitin, of Whitinsville	3 00
For the second best, L. H. Bigelow	2 00
For the second best collection double Zinnias, P. L. Moen	2 00
For the best collection Immortelles, P. L. Moen	3 00
For the second best, L. H. Bigelow	2 00
For the best display of Ferns and Lycopods, E. B. Hamilton	3 00
For the second best, W. T. Merrifield	2 00

GRATUITIES.

Olm Brothers, of Springfield, for their general display	$15 00
S. Salisbury, for his specimens of Zinnias	1 00
Mrs. S. D. Ward, of Shrewsbury, for floral design	2 00
J. C. Whitin, of Whitinsville, for his collection of variegated plants,	2 00
P. L. Moen, for his pyramids of Lycopods, etc.	1 00
Mrs. C. W. Hamilton, for her variegated Hollies	1 00
Mrs. D. Tainter, for her dish of flowers	1 00
Mrs. D. Tainter, for her plants for Wardian cases and hanging baskets,	1 00
Mrs. E. Jennison, of Auburn, for her specimens of Asters	1 00
S. Salisbury, for his collection of Ferns	1 00

G. E. FRANCIS, *Chairman.*

REPORT ON PEARS.

James Green, Jr., *Chairman;* J. Henry Hill, Henry Phelps, Edward Earle, John C. Newton, S. S. Foster, James Draper, Francis B. Rice, S. Harrison Knox, of *Worcester;* Newell Wood, of *Millbury;* and John F. Johnson, of *Northborough.*

The Committee on Pears submit the following report:

The exhibition of Pears this year is excellent; and if a fair allowance is made for the great dryness of the whole season, which has checked the growth of fruit and ripened it too early, the Committee would report the exhibition unusually fine. Judging absolutely, however, and making no allowances, they

have to say that the size of the Pears is perhaps not quite equal to that in exceptionally more favored years. The entries are numerous as usual, and in many cases the premiums were not awarded without some doubt, after weighing and comparing in the most pains-taking way. But each award was finally agreed to, by a large majority of the committee, and the report as a whole is unanimously submitted.

The following premiums are awarded :

For the best twenty varieties of twelve specimens each, 1st class, V. P. Townsend $16 00
For the second best, Alexander H. Bullock 12 00
For the third best, Joseph Lovell 10 00
For the best fifteen varieties of twelve specimens each, 2d class, Stephen S. Foster 12 00
For the second best, F. M. Marble, of Grafton 9 00
For the third best, James Draper 6 00
For the the best ten varieties of twelve specimens each, 3d class, Alfred Davis 8 00
For the second best, James F. Allen 6 00
For the third best, Stephen Salisbury 4 00
For the best five varieties of twelve specimens each, 4th class, Mrs. Geo. A. Chamberlin 6 00
For the second best, William Howe of Millbury 3 00
For the best three varieties of twelve specimens each, 5th class, Mrs. F. H. Kinnicutt 3 00
For the second best, Henry Chapin 2 00
For the best twenty-four Seckel Pears, on one dish, Clarendon Harris ... 2 00
For the best twelve Bartlett, John C. Whitin, of Whitinsville 2 00
For the best twelve Duchesse d'Angouleme, Willard Ward 3 00
For the best twelve Louise Bonne de Jersey, Henry Woodward 2 00
For the best twelve Lawrence, Samuel H. Colton 3 00
For the best twelve Sheldon, Theodore H. Bartlett 2 00
For the best twelve Beurre Bosc, Edward W. Lincoln 3 00
For the best twelve Flemish Beauty, William E. Desper 2 00
For the best twelve Beurre d'Anjou, John C. Whitin, of Whitinsville 2 00
For the best twelve Winter Nelis, James Draper 3 00
For the best twelve Beurre Hardy, Julius E. Tucker 2 00
For the best twelve Beurre Clairgeau, F. M. Marble of Grafton 2 00
For the best twelve Howell, James Draper 2 00
For the best twelve Urbaniste, Joseph Boyden 2 00
For the best twelve Doyenne Boussock, John C. Whitin, of Whitinsville 2 00
For the best twelve Beurre Superfin, Samuel H. Colton 2 00
For the best twelve Paradise d'Automne, J. Henry Hill 2 00
For the best twelve Durandeau, F. M. Marble, of Grafton 2 00

For the best twelve Beurre Langelier, Geo. Jaques $2 00
For the best twelve Belle Lucrative, Edward W. Lincoln..... 2 00
For the best twelve of any other variety (Dix) George E. Francis..... 1 00

GRATUITIES.

D. Waldo Lincoln, for his specimens entered in the 1st class.....$5 00
Samuel H. Colton, for his forty specimens entered in the 1st class..... 5 00
Mrs. David Fitts, of Oxford, for nine monstrous Duchesse pears, (too few to compete for any premium) 1 00
D. Waldo Lincoln, for his Washington pear,—there being no premium offered and no money left in the committee's control, the committee paid him the highest compliment in their power, by eating his specimens.

For the Committee,

JAMES GREEN, Jr., *Chairman.*

REPORT ON VEGETABLES.

HENRY L. PARKER, *Chairman:* GEORGE A. ADAMS, THOMAS R. NORCROSS, J. D. LOVELL, C. K. HUBBARD, RUFUS CARTER, DANIEL BEMIS, and GEORGE G. BURBANK, of *Worcester.*

In this department the entries, though less in number than at the last annual exhibition, are greatly above the average of preceding years; and, taking into consideration the extreme dryness of the season, the display is highly creditable.

The display of tomatoes, by Sylvanus Sears and P. L. Moen, are especially worthy of notice.

The committee make the following awards and premiums:

For the best display, Sylvanus Sears.....$15 00
For the second best, Stephen Salisbury..... 12 00
For the third best, P. L. Moen 8 00
For the best three Canada Crook-Neck squashes, Charles Nash 2 00
For the best three Marrow squashes, Alden H. Sears 2 00
For the best three large Crook-Neck squashes, Simon E. Fisher..... 2 00
For the best three Hubbard squashes, Horace Thayer..... 2 00
For the best three Mammoth, do., Franklin Baldwin..... 2 00
For the best three Turban, do., Simon E. Fisher..... 2 00
For the best six roots of Celery, John C. Whitin, of Whitinsville 3 00
For the best three Drumhead Savoy cabbages, Joel Hapgood, of Shrewsbury 3 00
For the best single specimen, John C. Whitin, of Whitinsville..... 2 00
For the best three Drumhead cabbages, A. H. Drury 3 00

For the best three Early Sweinfurth cabbages, F. J. Kinney..... $3 00
For the best single specimen, F. J. Kinney..... 2 00
For the best three large flat Brunswick cabbages, Simon E. Fisher..... 3 00
For the best three Red cabbages, A. H. Drury..... 2 00
For the best three Cauliflowers, F. J. Kinney..... 3 00
For the best single specimen, John G. Heywood..... 1 00
For the best collection of not less than five varieties of Sweet Corn, Sylvanus Sears..... 5 00
For the best tweive ears Sweet Corn, Joab Hapgood..... 2 00
For the best twelve Guernsey or long Parsneps, P. L. Moen..... 2 00
For the best twelve early short or half long scarlet Carrots, P. L. Moen, 2 00
For the best twelve long Orange Carrots, P. L. Moen..... 2 00
For the best twelve Long Blood Beets, P. L. Moen..... 2 00
For the best twelve Turnip Beets, P. L. Moen..... 2 00
For the best twelve Ruta Baga or Swedish Turnips, Simon E. Fisher... 2 00
For the best twelve Early Bassano, A. H. Drury..... 2 00
For the best twelve Flat or English Turnips, Simon E. Fisher..... 2 00
For the best twelve White Silver Skin Onions, William Y. Holman..... 2 00
For the best twelve Mangold Wurtzel, John C. Whitin..... 2 00
For the best collection of Potatoes, of not less than a half peck of each variety, F. J. Kinney..... 10 00
For the second best, James Draper..... 7 00
For the best collection of Tomatoes, of not less than six varieties, and not less than twelve of each variety, Sylvanus Sears..... 5 00
For the best dish of twelve of Gen. Grant variety, P. L. Moen..... 2 00
For the best dish of twelve specimens other than the above, P. L. Moen, (Wilcott)..... 2 00
For two best specimens of Watermelons, A. H. Drury..... 2 00
For the second best, F. J. Kinney..... 1 00

Of the other premiums offered for competition the Committee make no award.

GRATUITIES.

Newell Wedge, for melons..... $2 00
Herbert R. Kinney..... 1 00
Louis F. Kinney..... 1 00

H. L. PARKER, *Chairman.*

ANNUAL REPORT

OF

EDWARD W. LINCOLN,

Secretary and Librarian of Worcester County Horticultural Society.

To the Members of the Worcester County Horticultural Society:

In submitting his final report, at the close of his tenth (10th) consecutive year of official service, your Secretary may be pardoned for indulging in a brief retrospect and comparison. At the commencement of the past decade, the entire number of names, borne upon detached and imperfect memoranda, was six hundred and eighty-two (682). Of this aggregate, two hundred and fourteen (214) were, long since, gathered to their fathers. During his individual tenure of office, your Secretary has issued certificates of membership to four hundred and fifteen (415) applicants, of whom seven (7) are known to have deceased subsequently. The total number of names now registered upon the revised and manuscript roll, including alike the living and dead, amounts to one thousand and ninety-seven (1,097). So that, after making the proper deduction for cases of mortality, it would appear that there are eight hundred and seventy-two (872) accredited and living members of the Society. This aggregate is, however, doubtless excessive, since the only means of ascertaining the death of a member has been, as it is still, from the obituary columns of the public press, or from common notoriety.

The magnitude of the Annual Autumnal Exhibition, and the contribution thereto of articles by the members, have advanced in equal progression. In 1862, (there having been no exhibition in 1861,) the whole number of articles upon the tables was twenty-one hundred and seventy-two (2172). In 1869 and 1870, the aggregate was, as follows:

	1869.		1870.	
	Contributors	Articles.	Contributors.	Articles.
Apples	43	284	55	632
Grapes, &c., &c.	38	410	46	392
Pears	41	1054	77	1346
Plants, Flowers, &c.	26	902	32	1235
Vegetables	25	1734	33	836
	173	4384	242	4441

The number of volumes constituting the Library of the Society, at the date of its removal to Horticultural hall, in February, A. D. 1862, was four hundred and forty-one (441). The number upon our extended shelves, on the 31st of October ult., was one thousand and sixty-two (1,062). This was exclusive of pamphlets and unbound serials in both cases; and, in the latter, of volumes circulating among the members. And it is believed that the relative value of the collection has suffered no deterioration, with its increased size.

Such then was—such now is our condition. What it shall be, at the expiration of the next ten (10) years, must depend largely upon the wisdom and energy of our successors. Much can be accomplished by unselfish devotion; and of that, the Society has never yet felt any lack. More still may be achieved by a liberal appropriation of the means accumulated during past years of corporate thrift and private munificence. And all that has been gained hitherto, may be worse than lost, under the influence of a mean and penurious policy.

For several years past, upon more occasions than he recalls with pleasure has your Secretary animadverted upon the inadequacy of the Hall of the Society for the purposes of its erection; upon the unsuitableness of its location, owing to the tendency of heavy wholesale traffic to engross and incumber Front Street and to its inevitable, prospective ineligibility as an investment, from its want of conformity to modern requirements and taste. And, in justice to himself, he takes this opportunity to state, (what some seem determined to misapprehend,) that the general drift of his objections was rather to the Hall, in its restricted and technical sense, than to the entire edifice which bears that appellation. He is not about to consume your time, or weary your patience, by a repetition of arguments which are as convincing to himself as they are unpalatable to you. Having accomplished so much by persistent agitation,—the creation of a Committee with power and the will to sit!—he reposes on his laurels and assigns to others any individual concern in the incubation. It is due to frankness, however, to confess that the opinions of the Secretary have been confirmed by reflection and the lapse of time. Otherwise, he must impugn the discretion of those who built the existing edifice, the want of which, at the time of its construction, was no more urgent than is our present necessity. Or else he must concede the soundness of a policy which has no other nor higher aspiration than that of becoming tenant upon sufferance or at will of the Mechanics Association, without a lease in perpetuity, and with no plausible assurance that one can be had upon any terms whatever. Unless an arrangement can be effected, (assuming it to be the purpose of this society to occupy Mechanics Hall, in the future, for its Annual Autumnal Exhibition,) whereby a satisfactory lease for a term of years can be obtained, their responsibility is not to be envied who, proposing nothing of their own motion, are content to place obstacles in the path of those who march in harmony with the age in which they live.

The Annual Autumnal Exhibition is of such recent date; its magnitude must be so vividly impressed upon your minds; that there can be but slight need for enlarging upon the subject here. The superb hall happily set forth as, in its turn, it was exquisitely relieved by the luxuriant profusion and brilliant coloring of flower and fruit. There was, even there, however, no superfluity of space. The utmost that can be said is, that an exhibition, unusually extensive, was so arranged as to afford ample verge for the easy circulation of visitors. Had the various lots of apples and pears been properly disposed, and less crowded or even jumbled together as they unfortunately were, the need of additional tables would have required a relinquishment of yet more of the unoccupied floor. In this connection, and as pertinent to a proper display of the articles contributed, the Secretary feels it his imperative duty to again invite your attention to a most pressing want which is sure to obtrude itself unpleasantly upon such occasions. Our table-furniture is utterly insufficient for the uses of the Society. Under the vigilant custody of their chairman, the Committee of Arrangements have found an effectual cure for that mysterious "shrinkage" which was wont to curtail so materially the cloth provided for covering the naked boards. But the woful deficiency in our supply of plates can be remedied by no amount of watchful supervision. It is absolutely indispensable, if our Exhibitions are to maintain the proportions that they have lately assumed, that this deficiency should be supplied at an early day. A pattern of the style adopted by the Massachusetts Society, has been kindly furnished and now lies upon the table of the Secretary. Assurances have been given that a suitable quantity of such ware, equally substantial and of similar convenient shape, can be procured, if deemed advisable, at a very reasonable cost.

By the third rule of the Committee of Arrangements, adopted in the very infancy of the Society, it is strictly required that all specimens offered for premiums shall have been grown, by the competitors, within the County of Worcester.

There is no similar restriction upon membership, and the Secretary has never hesitated, upon application, to place upon the roll the name of a postulant from another County. It is suggested whether it may not better comport with the cosmopolitan tendencies of the times and the present standing of the Society to relax or rescind the restriction of the third article. Our exhibition offers the only practicable field for display and competition, by reason of proximity to cultivators in the Western Counties. Our own Society is the only one exclusively devoted to Horticulture, west of Suffolk. We could well spare an occasional premium for the sake of superior variety and a wider interest.

The fifth (5th) rule of the same Committee has caused so much dissension and given rise to so many different interpretations, that an authoritative and final decision, in the premises, is demanded in the interest of the Society.

5. No person shall be entitled to receive more than one premium for the same

specimen of fruit or vegetable. If any specimen has obtained a premium in a collection, it shall not be credited to the same person in a smaller collection, nor as a single specimen; nor shall any premium be awarded to a single variety, unless the specimens are equal to those of the same variety which may be included in any of the collections.

A substitution of the word "variety" for "specimen," wherever it occurs in the first clause, and in the first sentence of the second, will enable you to comprehend the construction of the rule most widely upheld and which was practically enforced at the recent Exhibition.

The Library is in its customary good condition. As will be observed from the usual tabular statement, the volumes have continued to circulate widely, and have been employed (in a way not so susceptible of demonstration) more frequently than in past years, for purposes of reference. It is not probable that many occasions will arise requiring large expenditure. The terrible calamities that have befallen the fair land of France may even prevent the further publication of those elegant serial works which constitute so much of the value of our collection. At the same time, the Society is happily able, and should be disposed readily, to place upon its shelves any new volumes, or later and better editions of the old ones, of which the possession may be desirable but whose cost may be too onerous for private resources.

The usual comparative table is appended, to indicate the annual circulation:

	Vols.
In 1862	114
In 1863	133
In 1864	179
In 1865	318
In 1866	387
In 1867	470
In 1868	580
In 1869	510
In 1870	544

The whole number of separate volumes acquired during the past official year, whether by purchase or donation, amounts to forty. A list of them with their titles is herewith presented:

Transactions of the Illinois Horticultural Society, 1868; 1 vol. octavo. From W. C. Flagg.

Transactions of the Worcester Agricultural Society, 1868; pamphlet. From C. M. Miles.

Transactions of the Massachusetts Horticultural Society, 1869; pamphlet. From E. W. Buswell.

Transactions of the American Pomological Society, 12th Session; pamphlet. From Hon. Marshall P. Wilder.

Dictionnaire de Pomologie, Les Poires, par M. Andre Leroy; 2 vols. octavo; Paris; society.

Parks, Promenades, and Gardens of Paris; 1 vol. octavo, society.

Say's Entomology; new edition; by Le Conte; 2 vols. octavo, society.

American Agricultural Annual, 1870; 1 vol. twelvemo, society.

American Horticultural Society, 1870; 2 vol. twelvemo, society.

Treatise on the Culture of Fruit Trees; By Wm. Forsyth: Notes by Wm. Cobbett. From S. H. Colton.

American Fruit Book; By S. H. Cole; 1849; 1 vol. twelvemo. From S. H. Colton.

The Management of Fruit Trees; By Geo. Jaques, 1849; 1 vol. twelvemo. From S. H. Colton.

Book of Fruits; By Robert Manning, 1838; 1 vol. twelvemo. From S. H. Colton.

New England Farmer, 1869; 1 vol. octavo, society.

Tilton's Journal of Horticulture, Vol. 5, 1869; society.

Tilton's Journal of Horticulture, Vol. 6, 1870; society.

Guide to the Study of Insects; By A. S. Packard, Jr.; 1 vol. octavo, society.

Horticulturist, vol. 25, 1869; 1 vol. octavo, society.

Gardener's Monthly, Vol. 11, 1869; 1 vol. octavo, society.

Country Gentleman, Vol. 33, 1869; 1 vol. quarto, society.

Country Gentleman, Vol. 34. 1869; 1 vol. quarto, society.

American Agriculturist, Vol. 28, 1869; 1 vol. quarto, society.

Journal of Horticulture, Vol. 16, 1869; London, 1 vol. quarto, society.

Journal of Horticulture, Vol. 17, 1869; London; 1 vol. quarto, society.

Florist and Pomologist, 1869; London; 1 vol. octavo, society.

New and Rare Foliaged Plants; London; 1 vol. octavo, society.

Agricultural and Horticultural Implements, 1870; pamphlet. From R. H. Allen.

The Strawberry; Its Culture; By J. M. Merrick; 1 vol. twelvemo, society.

The American Naturalist, Vol. 3, 1869-70; society.

Seventy-Five Flowers; By E. S. Rand, Jr.; 1 vol. twelvemo, society.

The Abridgement of the Gardener's Dictionary; By Philip Miller, F. R. S., Sixth Edition; London; 1771. From Louis Lewisson.

Department of Agriculture, Report of, 1868; 1 vol. octavo; Commissioner of Agriculture.

Revue Horticole, 1869; Paris; 1 vol. octavo, society.

Atlas of Flowers; Vilmorin; Paris; 1 vol. twelvemo, society.

List of Agricultural, Horticultural, and Pomological Societies; pamphlet; Commissioner of Agriculture.

California: Report of the Surveyor General, 1867, 1868 and 1869; pamphlet.

Central Park, New York; Thirteenth Annual Report of Commissioners. From Hon. Andrew H. Greene.

The Cottage Gardener's Dictionary; Third Edition; London, 1861; 1 vol. octavo, society.

In the report of the Committee, upon whose recommendation the Library of the Society was finally located in Horticultural Hall, occurs the following passage:

"The value of this Hall as a place of public assemblage, and patronage depends, in some measure, upon the manner in which and the purposes for which it is used. The valuable Library of the Society, deposited here, if bringing with it weekly or even casual meetings of the members, could not fail to influence, in some degree, the general estimation of this property by the public."

Had the Committee been endowed with the gift of prophecy, they could not have predicted the effect of the measure then advised upon the prosperity of the Society, with keener perspicacity. From the 27th day of February, A. D. 1862, when the removal of the Library was consummated, such weekly meetings of the members have been continued, down to the present hour, without the intermission of a single day in that entire period of almost nine years. There have been seasons of prosperity or discouragement, as there have been also alternations in which profusion contrasted with paucity of display. But, throughout every vicissitude, thanks to a zealous co-operation which was never appealed to in vain, a triumphant issue of the experiment was at no time doubtful. There are probably few, if any, members of the Society who have formed an exact, scarcely even an imperfect estimate of the aggregate attained by these apparently insignificant weekly contributions. And yet, within the nine (9) years, the sum of the articles exhibited upon our tables, exclusive of the display at the annual autumnal exhibition, has amounted to fourteen thousand two hundred and two (14,202). In addition, a convenient and appropriate place of resort has been afforded, in which new acquaintances have been formed and enlarged, and useful information gathered from diverse sources to be again widely disseminated. Here the committee on nomenclature have found and improved an extensive field of labor. No pains nor expense should be grudged which may promise to develop yet further the beneficent uses inevitable upon even the slightest increase of the time within which our halls are open to the public. In a future, not remote it is to be hoped, the Library may be kept open throughout the week, thereby copying the wise and profitable example of the Massachusetts Society.

The customary comparative statement of entries at the exhibitions, other than the annual autumnal, is herewith furnished for your more precise information:

COMPARATIVE STATEMENT.

Anno Domini.	Strawberries.	Raspberries, Gooseberries, Currants, Cherries, Grapes, Peaches, &c.	Apples.	Pears.	Flowers, Plants, &c.	Total.
1862	29	98	160	512	632	1431
1863	44	83	366	374	616	1483
1864	36	79	140	184	1008	1447
1865	48	104	41	161	1643	1997
1866	23	151	38	292	811	1315
1867	43	112	51	264	1716	2186
1868	37	132	111	120	807	1207
1869	95	207	78	190	1027	1597
1870	90	152	123	246	928	1539

In the figures for 1870, may be found slight but significant indications of the remarkable character of the past year. It is true that their number is but small, who remember seasons characterized by heat as fervid and continuous. But after listening to the self-complacent reminiscences of an experience that draws for its facts indiscriminately upon a first or second childhood, we, Gradgrinds that we are, accept the indisputable present and grow skeptical over the past. And, at any rate, this at least we do know for a verity; that if, some twenty (20) or forty (40) years ago, the land was cursed with a similar drought, there was not at that time one-quarter or one-half the need of water. In 1870, the small fruits, distinctively so called, were literally burned up. The kindness of Mr. Charles Nash has enabled your Secretary to prepare a tabular statement, the details of which, although gathered for another purpose, amply and clearly illustrate the blighting effects of a lack of rain. This statement comprises a list of persons who grew strawberries for the market in 1869 and 1870, with the ascertained yield per rod, and is as follows:

STATEMENT No. II.

Cultivators.	A. D. 1869.		A. D. 1870.	
	Rods.	Quarts.	Rods.	Quarts.
F. J. Kinney	80	1,700	80	1,300
—— Moore	160	3,100		
O. B. Hadwen	10	300	40	860
—— Ward	50	1200		
Perry Thayer	25	300	*120	2,500
Jonathan Lyon	120	1500		
William Y. Holman	40	300	none†	
Alden Sears	12	350	‡16	say 175
D. W. Knowlton	15	150	none	
Isaac Mills	22	300	⁂38	350
—— Griffin	30	275	‖	50
—— Stowell	15	250	*a*	
John B. Pratt	120	1500	*b*	1,000
James Draper	120	3000	240	*c* 2,880
George Adams	50	600	16⅔	80
Charles Nash	5½	220	*d*	

* Shaded by grape vines in 1870.
† Ploughed up.
‡ New bed: ½ less for drought.
⁂ New bed: ¼ to ½ less for drought.
‖ Old bed: grass, weeds and grape vines.
a Old bed; clover and sorrel.
b Bed old and new: ½ less for drought.
c See Note.
d Old bed, but clean; less than ½ of crop of last year, although not entirely owing to the drought.

Note. — Mr. James Draper has furnished the subjoined interesting statement:

"Quantity of land under cultivation, 1½ acres. Yield, about 90 bushels. Land cultivated in 1869, three-quarters of an acre. Yield from the same, 94 bushels. Yield of 1870 as compared with 1869, less than one-half. Mode of cultivation — hills and beds. Hill cultivation most satisfactory and fifty per cent. more profitable. Varieties cultivated: Wilson, Nicanor, C. Downing, Lady of the Lake, and Jucunda. The most productive varieties, the Nicanor and Wilson; the largest size fruit, C. Downing and Jucunda.

"The effect of the drought is most severely felt in the growth of vines for another year, which are only about one-third grown. Consequently the crop of 1871 does not at this time look very promising."

And this table, be it noted, includes only the Strawberry crop, which was mostly gathered before the full intensity of the drought was experienced.

From that drought there was, for Raspberries, no escape. In the very height of the season, when neither rain nor dew descended upon shrivelling berry and parching leaf, there fell upon the growers of this fruit a ukase, from the City Hall, more withering in its effects than the fabled simoom of the Sahara. Cultivators, whose water supply was cut off, had, however, the consolation of perceiving that this municipal discrimination against themselves enured to the benefit of the jockey and ostler, — "lewd fellows of the baser sort," intent solely upon bespattering other felloes, less wooden and dirty than themselves.

It was with feelings akin to those of the cartman, whose vocabulary was too inadequate for suitable expression, as he surveyed his load bestrewn upon the long and difficult acclivity so painfully surmounted, that your Secretary watched some seedling plants of his own successively dry up and perish. In his annual report for 1869, he gave a detailed statement of the yield of the different varieties cultivated by himself. As that statement, republished and circulated in the Transactions of the Society, has attracted some attention, it is repeated here in order that it may be contrasted with the widely differing results of the current year:

Amount of Land.	Variety.	Quarts 1869.	Quarts 1870.
253½ ft.	Knevett,	5	12
405 "	Philadelphia,	30	Eradicated.
399 "	Franconia,	34	10
1573½ ft.	Brinckle,	174½	82
216 "	Northumberland.	New plantation.	8

The new plantation of Northumberland Fillbasket and the greater development of the stools of Knevett's Giant, scarcely compensate for the elimination from the table of the Philadelphia. The Franconia, which comes latest into bearing, was hardly worth picking, and certainly did not repay the labor and manure expended upon its cultivation. And yet it is unquestionably one of the very best varieties that can be grown, upon a very heavy soil, in a season at all propitious. Brinckle's Orange, although affording a diminished product, nevertheless maintained in every respect its usual relative pre-eminence. Our distinguished associate, Charles Downing, in a note to your Secretary, unduly eulogistic of these reports, states that his "experience with Brinckle's Orange raspberry is the same as yours (the Secretary's). It is the most productive and highest flavored of any, but too soft for market purposes." And in the past unpropitious season, despite the drought, this variety continued in bearing from July 9th to August 11th, a term of five fruitful weeks.

Your Secretary has had no personal experience, recently, with the Blackberry. A few stools, planted many years ago, of the New Rochelle, have furnished abundant employment ever since in the attempt at their thorough extirpation. But, if the present season is a sample of those which are to follow, it is more than probable that the owners of large plats, now bristling with a *chevaux de frise* of blackberry spines, will wish themselves in the position of Othello, with their "occupation gone."

The culture of the Grape, during the past year, has been rewarded with unexampled success. It has appeared to matter little in what position were the vines, nor under what conditions of soil or treatment. Delaware and Concord, the exquisite Iona and the fine numbers of Rogers, each and all vindicated their character, and demonstrated the adaptation of a dry season to their constitution and needs. With the growing tendency toward the extension system of treatment as opposed to immoderate pruning; with a better understanding of the requisites for profitable culture, as combined in natural motion, adhesion and ascension of the shoots from a good, but not over stimulated soil; we deduce from the experience of the past favorable auguries for the future of viticulture, under propitious skies, even in our own County and Commonwealth. Years of hope deferred may well be spent in the assurance of such a return at last. This Society can, with a clear conscience, assume all the responsibility involved in the advice to its members to plant the vine.

Of the Apple and Pear what can be said that is not familiar to you all? Trees that have been barren, literally for a generation, have bowed their limbs to the earth under their burden of fruit. But it may be well to make a record of the fact, for future reference, that scarcely a drop of rain fell during their entire period of inflorescence. Nor should the premature and unseasonable ripening and decay of pears (the autumnal varieties more especially), escape notice. The last Beurre Bosc of your Secretary rotted at the core and disappeared on the eighth of October. The Beurre Langelier is reported ripe at that time, while the Beurre d'Anjou is accredited by the Doyen* of our Society with maturing, in fit condition to eat, upon the tree. The Winter Nelis, whether gathered or fallen, even now tempts the palate. How different from the crop of 1869, superior specimens of which were exhibited, in perfection, by our excellent Chairman of the Committee of Arrangements, as recently as May 5th of the current year. And yet, while this is true of the later varieties, the Bartlett never was in better or more prolonged keeping.

It is to be hoped that the crop of apples has not been so sadly demoralized. Should, however, the Greening and Baldwin require immediate consumption after gathering, there may indeed be found some trifling advantage in that infelicitous and untimely appointment of Thanksgiving, by Federal authority,

* Hon. J. M. Earle.

which, in its eagerness to anticipate State assignment, ignores centuries of precedent and almost encroaches upon the summer.

There is one subject involved in the proper consideration of the future successful culture of the apple, in regard to which your Secretary would esteem himself false to duty did he not invite your most earnest attention. The *Canker Worm*, whose permanent departure had been fondly anticipated, has signalized his reappearance upon "pastures new" by unwonted ravages. The defoliation of orchards upon our hill-sides impressed upon the eye of the beholder a scene of desolation that could not have been aggravated by the passage of a devouring flame. Under any circumstances this would be bad enough: but when we reflect that these evil consequences are aggravated by human carelessness, what adequate expression shall be found for our indignation? When a malignant disease breaks out in a private residence, the public claim and exercise authority to prevent the spread of infection. Should not the strong arm of power be as well interposed, where individual selfishness or indolence endanger the vitality of our orchards? The sharp-nosed blood-hounds of the law will scent out and pursue a pint of whiskey throughout the entire length of the Commonwealth. May it not be well to hamper the surplus energies of a superviceable constabulary by requiring of them the summary destruction of all trees which are reserved solely for the nourishment of the canker-worm and tent-caterpillar? The occupation might not be as lucrative to the force, but it would be of undeniable benefit to the community. It is respectfully suggested, whether you should not address a memorial to the Great and General Court, soliciting the encouragement of some other agency than wings and beaks for the destruction of insects injurious to foliage and fruit. It is disgraceful to the scientific acquirements and practical experience of the State that the canker-worm should thus be suffered to pursue its career of devastation, without check or hindrance. Should the State Constabulary be unable to cope with the foe, for want of adequate inducements, the energies of that lobby which besieged the State House so assiduously, in the interest of the Hartford and Erie, would doubtless prove equal to the emergency. It would be decidedly refreshing to behold either of those corrupt bodies illustrate the doctrine of salvation by works.

Every member of the Society, conjointly with other visitors, must have observed the extreme degree in which we are indebted, for much of the interest which attaches to our Annual Autumnal Exhibitions, to the unremitting industry and thorough skill of professional gardeners. It may be well for us to consider whether it does not lie within our especial province to make timely and apt recognition of such superior evidences of horticultural attainment. The objection may be urged, it is true, that the gardener by profession is already remunerated for his labor and time by his employer; and that, without the consent of the employer, he could exhibit none of the fruits of his toil. But it would seem that this Society might well and profitably look beyond the dull

horizon of dollars and cents, and those not drawn from its treasury, to that brighter vision so sure to dawn upon an enlarged and liberal policy. The expediency of offering generous premiums for pre-eminent skill, as illustrated in collections of flowers, fruits, and vegetables, to be open solely to the competition of professional gardeners, is presented for your careful consideration, in the assured conviction that no otherwise can a more judicious expenditure be sanctioned.

The price of admission to our future exhibitions should also be wisely considered and adjusted. It may be true that a higher tariff, imposed upon fewer objects, will produce equal or more revenue, although experience in determining proper rates of postage or the amount of fare upon public conveyances, is eloquent and emphatic to the contrary. But our treasury does not require to be filled by an exaction of the last cent, nor do we "encourage the practice and promote the science of horticulture" by rendering our exhibitions more difficult of access. A shilling is a large sum in the eyes of a Paisley weaver; and yet that humble class of workmen, who would find themselves virtually excluded from our rates of admission, have attained a world-wide reputation by a specialty in floriculture. Scarcely can the temples of the living God be opened save with a golden key, their doors upon golden hinges turning. Let not the votaries of Pomona and Flora be debarred from the indulgence of an innocent pleasure, in the exercise of their simple ministry, because of an unchecked greed.

Since the commencement of this report, a pear has been exhibited at one of the weekly re-unions of the Society, that may well exact a word of notice. A seedling originated by Hon. John Milton Earle, to whom this Society has been so long indebted for many and various services, and with whose parentage it is but vaguely indentified under the name of Earle's Russett; its apparently confirmed excellence should render it alike a source of pride to him and of interest to ourselves. Additions to the list of fruits, of approved good quality, are too rare to justify the unhesitating acceptance of every new candidate. It may be said of Earle's Russett, that it has been nursed with care and developed to an almost perfect assurance of decided superiority. Not entirely dissimilar to the Beurre Easter, in flavor, though with more sprightliness than that coy variety, the proof of this pudding also is evolved from the eating. The shrinking modesty of him to whom we owe the origin of this seedling, will, it is hoped, suffice to excuse the loudness of the blare which thus unblushingly trumpets his achievment.

There is one field of usefulness, almost entirely neglected in this community, which it would seem the especial duty of this society, with its ample means, to possess and cultivate. A plague of lecturers, it is true, already infests our public halls, countless and pertinacious as the flies in Egypt. But lectures that are other than inane and drivelling platitudes; that are instructive to an audience because the speaker is master of his theme; may be told off upon

both hands without exhausting the tally of fingers. What true horticulturist would not esteem his evenings well spent in listening to Asa Gray, could that profound student of Nature be induced to unfold her botanical secrets in his own consummate style of simple lucidity? The learned professor of the Peabody Institute might occupy some hours, to mutual advantage, in imparting a portion of that minute acquaintance with insects injurious to vegetation of which the printed page could contain but a tithe. Would not the relation of their experience by Breck, and Rand, and Strong, be of as much worth to the florists and pomologists of Worcester, as to their fellows in West Newton? Your favorable judgment of the policy, thus faintly outlined, is earnestly invoked.

Simultaneous with our own Autumnal Exhibition, another was held, as inferior in character as it deserved to be from the ignoble purpose by which it was prompted. The Worcester Agricultural Society appears to have deliberately concluded to resume those displays of flowers and fruits which, upon the organization of the Horticultural Society, were tacitly if somewhat reluctantly relinquished. Yet, in this fact, can be found no reason why we should be startled from our equanimity. We might, it is true, if equally oblivious of comity, propose premiums for the game-cock or velocipede, and so contribute our share toward the further demoralization of the community. It is even possible that, with *good* trotting, a crowd of pleasure-seekers would be attracted as eager to fill an exhausted treasury as those gaping throngs which now flock to witness the restricted, or stipulated speed! of sluggish racers from the classic purlieus of Pine Meadow or the ova-rian plains of Tasseltop. Happily, we are reduced to no such humiliating expedients. Public sentiment discriminates surely, if slowly. Even did it not, we could but pursue the even tenor of our way, seeking and attaining excellence in our exclusive pursuits. Let others avoid our exhibitions, suspecting the impartiality of our committees and the fairness of their awards, thereby betraying their own lurking bias to injustice. Let others refrain from honorable competition, because specimens, fit only for a third rate display, may be eligible to agricultural premiums derived from the bounty of the Commonwealth. Let him who prefers such investment, gain the whole world at the expense of his own soul! At this synchronal and rival exhibition, there was also displayed, according to the contemporary press, "a very superior collection of vegetables—the produce of the Worcester Poor Farm." Possibly the disposition of such produce rests wholly in the discretion of the steward, who has doubtless sound reasons for shunning competition with those not having, like himself, the benefit of unpaid labor. Or, more likely, the cause of this discrimination against our own exhibition, by the City of Worcester, may be found in the fact that, whereas the Agricultural Society is exempt from taxation upon its large and valuable tract of land, the Worcester County Horticultural Society is mulcted in an annual tribute of six hundred dollars, to replenish the exhausted treasury of the busy municipality in which its Hall is located.

In his Annual Report for 1867, the Secretary made use of the following language:

"The members of the Society who reside in the City of Worcester, are to be felicitated upon the inexhaustibility of the Municipal resources. So rich is the soil that it rejects manure. In this 'heart of the Commonwealth,' we behold no weary or overburdened traveller tempted by the Japanese invitation to pause by the wayside for relief! On the contrary, society is so cold — its formalities so polished — its exigences so rigidly observed — that the very demands of nature would be subjected to State 'search,' or Federal 'license,' unless endorsed by the original gardener. Hence it happens that all filth is so readily discerned. For this reason it is that the least speck of dirt is at once avoided as an obstacle by our heavily imposed and evilly disposed guardians of the peace. Therefore, and for that reason solely is it, that the sewerage of one half of the municipality is to be concentrated into a single channel, and thenceforth ejected to fertilize the valley of the Upper Blackstone. The tax-payers can perhaps determine, by reference to their assessments, the actual cost to them in money, of this system of terrene devastation. But the Agriculturist to a partial extent, and the Horticulturist in every branch of his profession, can but realize in all stages of their practice, the reckless and wasteful deprivation to which they are subjected. The æsthetic man is well enough in his way; but the pomologist is æsthetic naturally and by acquirement; and he confesses to an honest need of plant-food, by whatever euphuism it may be characterized. May it not be found that, with the ordure of Worcester will disappear its verdure? How long can a bank endure the simultaneous withdrawal of its capital and discharge of its liabilities? Can you burn a candle at both ends to advantage?"

Since that report was penned, the undertaking therein referred to has been steadily pushed forward to its conclusion. The earth has been robbed of its moisture without the compensation consequent upon that alleviation of the soil inevitable upon a judicious system of under-drainage. The writer is probably alone in his objection to the theory of subterranean sewers, upon sanitary considerations. As large laboratories for the decomposition of human *excreta*, or as capacious storehouses for the retention and ultimate dissemination of noxious gases, their potential agency must be conceded. Nevertheless he believes in purification by rain, in disinfection by the direct rays of the sun. To the advocates of the popular system and practice he would recommend a hearty snuff at that concentrated fragrance, effluent from those manifold and horrent vents to the civic fundament, whose "offense is rank and smells to heaven," even amidst the frosts and snows of winter. But it is to the reckless, and therefore wicked, waste of fertilizing material that the attention of all cultivators of the soil should be particularly directed. As a single element in the computation of this loss, so possible to avoid, and for that reason the more inexcusable, consider the fact that a barrel of flour is estimated in the annual subsistence of each and every individual in the community. All then that enters into the formation of two hundred thousand (200,000) bushels of wheat saving the two (2) per cent. that remains in the human body, the sole and exhausting product of twenty thousand (20,000) acres, is yearly extracted from

the prairies of the West, by the population of this single City, to swell the clam banks of Narragansett Bay. Devastation of the essential constituents of the different varieties of fruits, advance with similar unthrift. Do we need to inquire why our long-established orchards refuse to yield their increase, excepting only seasons like the present, in which the fierce stimulus of a torrid heat compelled a growth that threatens final and utter exhaustion?

This whole subject, compared with which wars and rumors of wars are dwarfed into insignificance; this subject which involves in its ultimate relations no less consequences than the future subsistence of entire nations, whereas other matters but affect their prosperity or independence, has latterly forced itself upon the attention of the People and Parliament of Great Britain. It is felt that, without a speedy change, the land must continue to deteriorate; its produce to lessen with its impoverishment. Accordingly commissions are formed, investigations set on foot, experiments prosecuted. Note the basis on which they proceed!

"It is unquestionable that so well fed an animal as man ought to be good farm stock. Compared with the sheep, he is little better fed, and he takes less out of his food. Take any given human population; its average weight is a pretty constant quantity and it increases not more than two per cent. annually. The total weight of the population of England increases not more than two per cent; that is all that man saves out of his year's food in this country. On the other hand, the total weight of a flock of sheep will increase in weight from forty to sixty per cent. in the same time. There is a smaller waste of poorer food in the case of sheep than in the case of man; and yet the former is the best farm stock we have for maintaining the fertility of land, and the latter is, in this respect, virtually good for nothing. What can be the explanation of this anomaly? The whole excrement of the sheep-fold is deposited on the land which it is to benefit, while the whole waste from our houses finds its way into the river." *Et sic passim.*

Observe now the actual result of an attempt to utilize sewerage by irrigation, thus saving what would otherwise be lost and restoring to the earth much of which it had been robbed. The town, or borough of Romford, England, having made purchase of a farm for the purpose of experiment, a party of gentlemen

"visited the premises on the ninth day of August last, and had their attention drawn to a piece of Italian rye grass, sown on March nineteenth, since which time four crops have been cut, averaging seven and one-half tons per acre, and selling for £1 per ton on the ground. Close by was a piece of Dalmahoy potatoes, planted on April second, which were producing upwards of one and one-half hundred weight per rod, and worth about £25 per acre. Some beans and peas sown on April second, produced—the former £9 and the latter £15, without the straw. Another piece of rye grass, sown April ninth, will be ready to cut for the fourth time in a few days. Adjoining were about four acres of transplanted mangel wurzel looking rank and strong. Another crop of the same kind exhibited some very fine roots, many of the *globes* being two feet in circumference, and some of the '*long*' two feet in length."

. . . . . .

"Close by was a crop of intermediate carrots, about four acres in extent,

MASSACHUSETTS AGRICULTURAL COLLEGE

sown on April fourth, a month later than they ought to have been, some of them have already been cleared off and sent to market, where they fetched at at the rate of £41 per acre."

The statement is full of similar details, a complete citation of which would occupy too much space and time. The conclusion was reached that, "as each crop is labeled, showing the time of planting and the results that have been achieved, the beholder cannot but be astonished at the rapidity with which the various crops have sprung up and reached their present state of growth."

For two centuries have the inhabitants of this Commonwealth been committing waste; dissipating, without thought for the morrow, all that affluent provision which a beneficent Providence had garnered up for human use throughout the ages. Within the last five years have the dwellers in this Heart of the Commonwealth lavished their energies and substance to facilitate the process of devastation, and to counteract, so far as lies within their power, the recuperative agences of nature. The cry of alarm, first sounded in behalf of this Society, from this place, has been echoed by a few watchful observers. Yet the denizens of the valley are but too prone to scout the warning when the peril is even imminent to the watchman upon the heights.

Pursuant to the instructions of the Trustees, a petition, duly attested by the signature of the Secretary and the seal of the Society, was presented to the Great and General Court, at its latest and most lingering session, praying for permission to citizens to destroy birds, predaceous of fruit, vegetables, etc., upon their own premises. This petition, with an independent memorial in aid thereof from the Secretary, in which facts were stated and the names of witnesses furnished, was referred to its Committee on Agriculture by the House of Representatives. Days and weeks elapsed, in which the current newspapers of this County were carefully watched for an order of notice designating some day for an audience of the petitioners. By chance, such order was at length detected in the columns of the "Boston Advertiser — a pretty practical hint that the community must take cognizance, at their peril otherwise, of more things than the public statutes. This "hearing," however, like all which succeeded it, was appointed for Thursday — an insuperable obstacle, therefore, to the attendance of the Secretary, who was not authorized to close the Library for any such purpose. To his written application for the assignment of a different day, was returned the courtesy of unbroken silence. Finally, instead of the permission solicited, the Committee reported back a bill allowing the species of birds complained of to be killed upon private premises during the months of September, October and November! That is, after a majority of the fruits which it was sought to protect should have been long out of season. The license to destroy the *turdus migratorius*, or pseudo-robin, in November— how considerate and gracious! In the contemporaneous accounts of the action upon this bill, it is narrated that "the absurdity of the house, with its very small experience in sporting, and its slight knowledge of the habits of birds,

passing upon the details of the bill, was pointed out, and accordingly the amendments adopted were only such as seemed to be clearly called for. The chief of them were those which strike out two sections on the subject of duck, teal and brant, and which strike out the permission to kill robbins in the act of destroying fruit, etc., etc. The bill was ordered to a third reading, but the House was very thin and hardly more than a quorum was present."

Another reporter remarks that "several attempts to be funny, on the part of members, excited some laughter." Such levity is not inexplicable. The petition was merely from some fruit-growers, desirous of protection in the enjoyment of the results of their arduous toil: while the bill under discussion, to use an expressive if somewhat slang phrase, *had no money in it!* For it is to be noted that a silence as of the grave hushed the risibilities of this same House, when the fate of a measure, in behalf of which no petition had been offered, but which was designed solely to enhance the value of stock and bonds accruing to the members by purchase or otherwise, trembled in the balance.

. It is respectfully recommended that a similar petition be presented at the next session of the General Court, and that one or more members of the Society be designated to appear before the proper Committee to enforce its prayer. The experience of another season strengthens the position uniformly maintained in these reports. The advocates of immunity have pointed to the angle-worm as the habitual food of the birds (the *turdus migratorius* in especial), that are sought to be outlawed. But, as the angle worm, innocuous at worst, has descended to the antipodes in search of moisture during the late tropical summer, it would be curious to learn upon what else than fruit these fledgeling sciolists and clod heads suppose their untamed aviary to have gorged! A concession of the prayer of your petition would occasion but trifling destruction of the obnoxious birds. The whole frugivorous tribe are naturally timid. Their bills protested upon presentation, they would offer their notes to those who profess to desire them for an accompaniment to their morning nap. Possibly our honored ex-president,* might welcome large flocks, and hesitate yet more between the sensible delights of the palate and those tuneful memories which he evokes from the resources of an exhaustless fancy, or the depths of his inner consciousness. To him — the music — heaven save the mark! harsh, disonant, incessant; without strawberries, or pears, or grapes. To our friends upon Sunnyside, the Seckel in unmarred perfection, as it was *not* exhibited, in this Hall, on the thirteenth of October ult. To the rest of us peace at the last, as we find ourselves left, unmolested, to reap the reward of our toil in the fruits which we love.

The establishment of a decent compensation for the Chairman of the Committee of Arrangements, and a suitable addition to the salaries of the Treasurer and the Secretary and Librarian, are commended to your serious notice and favorable action. In the infancy of the Society, and even later while it was

* Ex-Governor Bullock.

struggling to maintain and extend its usefulness beneath an onerous load of debt, economy even to the verge of penuriousness, was, perhaps, justifiable. But, with increase of means, and consequent freedom from financial embarrassment, should come that generosity which succeeds justice. Few are aware of the labor and responsibility imposed upon one or more of these officers. Their time taken up is immeasurably less than that broken up, in your service. Gratuitous labor is ever poorly appreciated, and what is that but gratuitous of which the compensation is simply nominal? "Thou shalt not muzzle the ox that treadeth out the corn!" is an injunction as applicable in Horticulture as to the custodians of the bovine genus.

These remarks are made the more freely as they cannot be suspected of being urged with a view to the individual benefit of the writer. His intention of declining a re-election to the office which, by your partiality, he has held for the last ten years, was long since announced. But, with reference to an augmentation of the salary of the Secretary and Librarian, he would advise further, that the Library should be constituted the office of the Secretary, to form a sort of head-quarters or place of resort for members, in which that official should be expected to spend so much of his time as might in equity be exacted. A long and decided step will thus be taken toward that consummation, when, with the Library open daily, as in Boston, every member of the Society will realize that there is at least one place accessible, to which he may resort in pursuit of information, for the statement of facts within his personal observation, and possibly for barter or traffic. Until something like this is achieved; until the consumers and producers among our number are brought face to face and made more intimately acquainted: the best and most fruitful purposes in the ownership of a Hall will fail to be subserved. The advantages to be derived from the adoption of some such step, as is thus partially indicated, can be imperfectly estimated by those who are familiar with the benefits that have ensued, from the opening of the Library on Thursdays only of each week.

All which is respectfully submitted.

EDWARD W. LINCOLN,

Secretary and Librarian.

Horticultural Hall,
Worcester, Mass., Nov. 2, A. D. 1870.